DOCUMENT RESUME

ED 458 462 CG 031 323

AUTHOR Sapia, Jennifer L.
TITLE Eating Disorder Prevention Programming.
PUB DATE 2001-04-00
NOTE 24p.; Paper presented at the Annual Conference of the National Association of School Psychologists (Washington, DC, April 17-21, 2001).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *At Risk Persons; *Eating Disorders; Elementary Secondary Education; *Females; *Integrated Services; Intervention; Prevention; Resilience (Personality); *School Psychologists

ABSTRACT

This paper provides information for school psychologists regarding the necessity and benefits of school-based prevention programming for students at risk for developing eating disorders (i.e., females). School-based programming is a cost-effective means of reaching the largest number of individuals at once and identifying those individuals requiring more intensive intervention services. The educational setting provides an ideal forum for monitoring and for follow-up services. The identifiable risk and protective factors associated with eating disorder symptomatology; the literature base regarding program efficacy; limitations of current models; and need for early school programming are all reviewed. A specifically designed risk and protective model of eating disorder prevention implemented with a sample of young adult females is described. (Contains 1 table and 28 references.) (JDM)

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ED 458 462

Abstract

Eating Disorder Prevention Programming

Jennifer L. Sapia, Ph.D.
Pitt County Memorial Hospital
Brody School of Medicine
Department of Pediatrics
East Carolina University

The goals of this presentation are to educate school psychologists regarding the necessity and benefits of school-based prevention programming for students at-risk for the development of eating disorders (i.e., females). School-based programming is a cost-effective means of reaching the largest number of individuals at once and identifying those individuals requiring more intensive intervention services. The educational setting provides an ideal forum for monitoring and follow-up services.

This presentation provides information on both the identified risk and protective factors associated with eating disorder symptomatology, the limited literature base regarding program efficacy, limitations of current models, and the necessity of school-based programming beginning at increasingly earlier ages (i.e., middle school). The presentation culminates in the review/evaluation of a researcher designed risk/protective model of eating disorder prevention implemented with a sample of young adult females. Special emphasis is placed on current program directions, modifications, and implications for school-based programming. School psychology participants can expect to leave with a working knowledge of the benefits of school-based prevention programming as well as a general model that can be implemented in the educational system with minimal investment of time, as well as financial and personnel resources.

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Overview

The occurrence of eating disorders cuts across socioeconomic, racial, age, gender, and intellectual boundaries.

- Approximately eight million American adolescents and adults display some symptoms of anorexia or bulimia (Broccolo-Philbin, 1996).
- Five % of the population meets the restrictive diagnostic criteria of the American Psychiatric Association (1994) for clinical cases of these disorders (Phelps et al., 1999).
- More than one third of adolescent females report participating in aggressive methods of weight reduction and control, including self-induced vomiting, use of weight loss supplements, chronic dieting, excessive exercise, and laxative abuse (Phelps, Andrea, & Rizzo, 1994).
- Eating disorders are the third most common chronic illness affecting young adult females in the United States (Hsu, 1996).

Primary Prevention

Health care providers are calling for greater efforts and resources aimed at public education, primary prevention research, and health promotion to reverse this trend (Kaplan, 2000; Winzelberg, 1999). The prevalence of eating disorders and associated health risks, morbidity, and mortality renders prevention programming an urgent health care need (Franko, 1998; Phelps, Dempsey, Sapia & Nelson, 1999; Piran, 1997).

Although the need for prevention programming is certainly evident, the field remains in infancy. Few programs have been systematically implemented or critically evaluated. Moreover, there is minimal research on the efficacy of programs that focus on the factors considered to be fundamental components of eating disorders. In terms of school-based prevention, the majority of programs have been conducted in the middle or high school grades, with few targeting elementary children.

Program Efficacy and Limitations

To date, prevention efforts among women of various ages have met with limited success. Research has demonstrated that curriculum interventions can, and do increase knowledge regarding eating disorders and the negative correlates on health (Huon, 1994; Killen et al., 1993; Nebel, 1995), as well as modify existing beliefs and attitudes (Franko, 1998; Levine, Smolak, & Schermer, 1996). However, attitude changes alone have not led individuals to modify the unhealthy methods they use to control their weight (e.g., dieting, use of laxatives, excessive exercise) nor adopt health promoting behaviors (e.g, nutritional eating, moderate exercise).

Limitations of previously published intervention efforts (Franko, 1998; Jerome, 1991; Mann et al., 1997; Paxton, 1993) include the reliance upon didactic presentations of factual information (i.e., does not balance content with process), the central focus on risk factors to the exclusion of protective factors, brevity of intervention, and simplicity in terms of the variables addressed. More importantly, most of these prevention models are not empirically driven.

In order to be effective, primary prevention must reduce risk, either by removing the cause or by rendering the individual unsusceptible to it (Striegel-Moore & Steiner-Adair,

1998). Effective psychosocial prevention programming is dependent upon the identification of specific risk and protective factors that significantly influence the onset of a disorder. After successful identification of these factors, specific strategies can be developed with the prevailing goal of reducing the risk factors and enhancing the protective factors.

Research has shown that the identified risk factors are highly resistant to change. Therefore, the focus needs to be placed on variables that are more modifiable (e.g., self-concept). In addition, in order to develop effective interventions, researchers and practitioners must understand the psychological and physical processes that occur during development as well as the sociocultural context.

Sociocultural Model of Eating Disordered Behavior

A sociocultural model offers the most supported theoretical explanation for western societies' high levels of body dissatisfaction and the increasing rates of eating disorders among females (Alexander, 1998; Phelps, Johnston, & Augustyniak, 1999; Tiggemann & Pickering, 1996). According to the model, societal standards of beauty overly accentuate the desirability of a thin figure. As well, females are bombarded daily via the visual media by unrealistic images of the ideal female body. The promulgation of cultural standards of beauty that are genetically unattainable by the majority of women often results in the pursuit of thinness which has important consequences in terms of excessive dieting, lowered self-esteem, and the emergence of eating disordered behavior.

Risk Factors

- Female gender
- Body Dissatisfaction (dissatisfaction with one's current body size and shape)
- Drive for Thinness (degree to which an individual endorses and strives to achieve a slim standard of bodily attractiveness)
- Unhealthy Methods of Weight Regulation (dieting, excessive exercise, vomiting, laxatives, diuretics)

Females are 10 times more likely than males to develop an eating disorder (Fairburn & Beglin, 1990), making gender a strong risk factor. In addition, preoccupation with weight and shape are salient factors. The eating disorder literature consistently supports body dissatisfaction as a critical predictor in the development of eating disordered behavior (Koenig & Wasserman, 1995; Phelps et al., 1999; Schulken et al., 1997). Body dissatisfaction is exacerbated by cultural norms in western society that emulate an ultra thin body type. As these norms valuing thinness predominate, "normal" eating often becomes synonymous with dieting for women (Molloy & Herzberger, 1998) as they undertake various methods to lose weight and reduce these negative feelings. The available literature has substantiated the notion that cultural ideals can influence the extent to which individuals utilize dieting, exercise, restrained eating, and other compensatory measures to manage feelings related to body image (Stice, Schupak-Neuberg, Shaw, & Stein, 1994; Tiggemann & Pickering, 1996). Therefore, the drive for thinness and unhealthy methods of weight regulation have been identified as relevant risk factors in the precipitation and maintenance of eating disorders in western cultures. Notably, concerns and preoccupation with body shape and weight are widespread and

appear to be uniform for women of all ages (Cash & Henry, 1995). Recent studies support the finding that body dissatisfaction is a pervasive condition that is prevalent across the lifespan and not limited to younger samples of adolescents and college women (Stevens & Tiggemann, 1998). Body image and weight concerns occur so widely among females that the phrase "normative discontent" has been coined to describe them (Rodin, Silberstein, & Streigel-Moore, 1985).

Adolescents

A recent study by Kilpatrick, Ohannessian, and Bartholomew (1999) indicated that, collectively, adolescents experience difficulty perceiving actual body weight.

- They don't do an accurate job of assessing weight status, but they are very much cognizant of and concerned about weight
- 1/3 unable to appropriately classify self as thin, normal, heavy
- 2/3 of girls attempt to lose weight (dieting can be a precursor to eating disorder development)
- Adolescents are likely to choose unhealthy weight change methods
- 15% of adolescent girls uses laxatives and/or vomiting to control weight
- Peer and family influences
- Developmental changes that occur during puberty (weight gain)
- Prevention associated w/ weight change behavior warranted

Protective Factors

- Physical Self-concept (feelings about one's physical appearance)
- Personal Self-concept (an individual's sense of personal power, locus of control)
- Social Self-concept (appraisal of one's peer relationships and social success)

Self-esteem is a critical component in adolescent development and health behavior:

- Adolescence is characterized by the "self-esteem slide"
- 33% decline in self-esteem over the course of adolescence
- May open the door for health compromising behaviors
- When middle school girls asked about self-worth, the single most important determinant for white girls was "confidence in the way I look" (Pesa, 1999).
- Critical self-esteem building exercises should be incorporated into school health programming in the elementary years to prevent the slide.

Research supports several psychosocial variables as fostering resistance to the sociocultural pressures to conform to the thin ideal (Phelps, Dempsey, Sapia, & Nelson, 1999). Physical self-esteem, in the form of recognition of positive attributes associated with one's physical appearance, has been shown to increase feelings of self-efficacy and reduce the internalization of sociocultural norms promoting excessive thinness. Likewise, a strong sense of self in interpersonal interactions has been linked with positive feelings about one's body and appearance (Strong & Huon, 1998).

These factors are personal characteristics that can be enhanced and utilized to enable individuals to resist the ubiquitous cultural pressures to conform to the unrealistic ideal

female body image. Activities designed to build physical self-esteem and a sense of personal power and confidence in interpersonal interactions has been shown to reduce body dissatisfaction and adherence to the thin ideal (Phelps et al., 1999).

Collectively, this information accentuates the importance of an empirically driven model in designing a comprehensive, risk/protective prevention model. If programs only address negative risk factors (e.g., peer pressure, body dissatisfaction) or utilize a prescriptive informational format, participants are unlikely to develop the requisite adaptive coping skills shown to mitigate future eating disorder symptomatology.

Overview of a Four Session Eating Disorder Prevention Program Based on a Risk/ Protective Model

- Implemented with a sample of undergraduate women.
- Based on a psychoeducational curriculum which included the presentation of information (e.g., dangers of unhealthy methods of weight regulation, nutritional guidance) as well as skill building techniques (e.g., value clarification, development of an internal locus of control).
- Program was unique in that it:
    - used active individual participation and collaborative learning (as opposed to a traditional, passive lecture format)
    - balanced content with process
    - highlighted strengthening specific personal attributes that have been shown to attenuate the sociocultural pressures promoting disordered eating behaviors.

Program Goals

Reduce the following risk factors:

- Body Dissatisfaction
- Drive for Thinness
- Unhealthy Methods of Weight Regulation

Increase the following psychosocial factors:

- Physical Self-concept
- Personal Self-concept
- Social Self-concept

Method

Participants

- 80 undergraduate females belonging to two sorority groups at a state university.
- Quasi-experimental design: one group was randomly selected to participate in the prevention program and the other was designated as the control group

Instruments

- 65-item "college health" questionnaire was administered to all participants (both groups) prior to and immediately following the prevention program.
- Questionnaire assessed the following 6 factors believed to be strongly correlated with disordered eating attitudes and behaviors:
    - Body Dissatisfaction and Drive for Thinness, as measured by subscales of the Eating Disorder Inventory-2 (EDI-2; Garner, 1991).

- Personal Self-concept, Physical Self-concept, and Social Self-concept, as measured by the subscales of the Tennessee Self-Concept Scale:2 (TSCS:2; Fitts & Warren, 1996).
- Current methods of weight regulation, a treatment efficacy variable, measured by a set of researcher designed questions.
- Qualitative data collection: following the completion of the program, participant satisfaction, likes and dislikes, strengths and weaknesses, perceived benefits of the program were assessed.

Treatment

- Four weekly sessions of 1 ½- 2 hours in length
- Sessions presented by the research team (the investigator and two graduate students) whose roles were to educate and to create a safe, supportive environment that fostered interaction and encouraged the sharing of personal information and collaboration.
- Structured sessions consisting of large and small group discussions (11-12 women) and activities.
- Members collaborated on problem solving tasks, shared personal experiences and feelings, and supported each other in addressing challenging issues.

Objectives:

- Facilitate a critical appraisal and evaluation of western societies' norms regarding the ideal female body image
- Improve self-image and resist/reduce/dismantle cultural/societal obsessions with weight and thinness
- Encourage personal value clarification
    - Enhance individual resilience via interactive lessons (e.g., small group discussions, problem-solving tasks, and cooperative exercises)

Curriculum

The initial two objectives targeted reducing the internalization of sociocultural pressures for thinness by:

- Discussing and illustrating the roles of the media, peers, and family in perpetuating this unrealistic ideal
- Cultivating more effective adaptive coping strategies (specifically, improving physical self-concept and personal competence).

These objectives were addressed by:

- Using pictorial examples to illustrate the current cultural pressures to maintain an ultrathin body
- Identifying positive attributes of one's physical appearance
- Encouraging the improvement of personal physical fitness and strength
- Encouraging the development of an internal locus of control
- Focusing on constructive ways to respond to external pressures.

The later stages of the program focused on reducing body dissatisfaction as well as facilitating the adoption of healthier attitudes and behaviors regarding weight and body image by:

- Discussing the genetic determinants of body size and shape and the natural weight gain associated with a woman's development.
- Disseminating information regarding typical body fat percentages and height-weight ratios.
- Exploration of healthful methods of eating, exercising, and weight maintenance.
- High risk behaviors and the negative consequences associated with unhealthy weight regulation techniques (e.g., restrictive dieting, use of laxatives) were identified and participants were provided with information regarding appropriate methods of weight modification and maintenance.

Procedure

The two sororities were approached through contact with individual sorority house boards. Both university groups were eager to participate in a program on health promotion and body image and it fulfilled certain sorority group requirements regarding educational programming. Informed consent was obtained and participants were told of the voluntary nature of participation in the program. The confidentiality of information obtained was emphasized to participants and maintained by the use of code numbers on data sheets for identification purposes.

Results

Pre and posttest means for the experimental and control groups were calculated and significant differences were assessed using multivariate analysis of variance (MANOVA). Using Hotelling's Trace, no significant pretest differences existed between the groups ($T=.135$, $F\ [6,73]=1.64$, $p=.148$) and all means were within the normal range, supporting the contention that the groups were similar prior to the implementation of the prevention program.

Statistically significant post treatment differences were found between the experimental and control group using Hotelling's Trace ($T=.477$, $F\ [6, 73]=5.81$, $p<.001$). Table 1 presents the results of post-hoc univariate analyses that were conducted on the six dependent variables. Statistically significant differences were found between the groups on five of the six variables:

- Drive for Thinness ($F\ [1,78]=7.65$, $p<.01$)
- Methods of Weight Regulation ($F\ [1,78]=14.68$, $p<.001$)
- Physical Self-concept ($F\ [1,78]=10.74$, $p<.01$)
- Personal Self-concept ($F\ [1,78]=14.35$, $p<.001$)
- Social Self-concept ($F\ [1,78]=8.45$, $p<.01$)

In other words, the group-based prevention program was successful in increasing the psychosocial factors of physical, personal, and social self-concept and reducing the drive for thinness and methods of weight regulation, two significant risk factors associated with the development of eating disorder symptomatology.

Discussion

Although the program was not successful in significantly reducing one variable, body dissatisfaction (F [1,78]=.586, p= .446), it should be noted that the treatment group's level of body dissatisfaction did decrease following the intervention whereas the control group's level remained unchanged from pre to post-testing. Moreover, utilizing qualitative measures, participants reported much lower levels of dissatisfaction with their bodies following the program. It is important to keep in mind that body dissatisfaction is particularly germane to the female population and high levels were noted for all women in the study at pretesting. The findings of this research are substantial as to date, no eating disorder prevention program has been found to be effective (Winzelberg, 1999). In other words, they have not resulted in changes in behavior. Following the prevention programming, participants reported engaging in significantly fewer unhealthy behaviors to control their weight (i.e., purging, fasting, laxatives) than the control group.

Not only was the program able to significantly reduce the majority of factors that place young adults at risk for symptom development, but more importantly, it was able to strengthen the personal qualities that have been shown to enhance resistance to the sociocultural pressures promoting eating disordered behavior (Phelps et al., 1999).

Notably, a group format that encouraged active member participation through small group discussions and cooperative exercises was ideal in two respects. Not only was it successful in achieving programmatic goals, but it was also noted as a significant strength of the program by participants. Qualitative comments following the completion of the program were extraordinarily affirmative and encouraging, centering on the liberation of having an overwhelmingly supportive group environment in which to openly and

honestly discuss the myriad of pressures placed on young women in western society to be thin. Additionally, the women's comments focused on how well the program enabled them to develop an internal locus of control and realize that they, not society, are in charge of how they feel about their bodies. In addition to the supportive nature of group work, it is also an ideal format for prevention efforts as it is a cost effective means of reaching a large number of individuals at once and identifying those that may benefit from more intensive intervention services.

Based on the promising findings of this research, it is important to test the long-term efficacy of this prevention program by incorporating a follow-up component at 6 and 12 month intervals to determine whether the changes in behavior are maintained over time. In other words, does this program significantly reduce eating disorder symptomatology for months or years in the future? In addition, the utilization of "booster sessions" may be warranted to maintain the positive effects evidenced thus far. Comparisons of numerous follow-up procedures that vary in length, duration, and frequency are likely to be most advantageous. In this particular study, follow-up measures could not be completed due to attrition of the sample as many women graduated from college following the completion of the program.

Therefore, it is recommended that future research efforts be implemented in school-based settings where they can be incorporated as part of the health education curriculum, rather than as a brief intervention. This setting is ideal for follow-up and continuous monitoring to identify those individuals who may benefit from more intensive services (i.e., those displaying symptomatology). Likewise, intervention programming should be targeted at the upper elementary grades as dieting and weight concerns continue to be

documented at increasingly earlier ages. Attempts should also be made to include males in prevention programming as their role in the development and maintenance of symptoms should not be overlooked. It is appropriate for males to participate in prevention programming so they are afforded an opportunity to examine their own beliefs regarding beauty and become cognizant of any pressures they may be exerting on their female peers to adopt unhealthy eating practices. The development, implementation, and assessment of a separate curriculum for males is greatly needed.

Implications for School-Based Prevention Programming

The high prevalence of eating disordered behavior among school-age children and the serious psychological and socioemotional correlates (underachievement, interpersonal difficulties) of theses disorders indicate the necessity of:

- Programming at earlier ages (elementary school years)- formative and developmental years
    - 2 out of every 5 preadolescent girls have engaged in weight loss efforts (Franko et al., 1998).
- Comprehensive School/Community Based Framework incorporating educational providers (teachers, coaches), health and mental healthcare providers (nurses, physicians, school psychologists, counselors, social workers), parents
- Extensive program evaluation and follow-up services
- Developmentally appropriate training materials and activities
- Creating preventive interventions that fit the ecological realities of educational settings (time, personnel)
- Providing the curriculum as part of general health education instead of a separate, time-limited intervention
- These interventions are complementary to the typical goals of schools in terms of social competence promotion.

School psychologists play an integral role in:

- Educating teachers, parents, and other school personnel about the relevant signs, symptoms, and characteristics of eating disorders
- Their position as role models for student behavior (emphasize fitness and general health)
- Educating school personnel on the importance of fitness management rather than weight reduction
- Modifying environmental norms to support the objectives being taught in the curriculum.

References

Alexander, L. (1998). The prevalence of eating disorders and eating disordered behaviors in sororities. College Student Journal, 32, 66-75.

Cash, T., & Henry, P. (1995). Women's body images: The results of a national survey in the USA. Sex Roles, 33, 19-28.

Fitts, W., & Warren, W. (1996). The Tennessee Self-Concept Scale (2nd -edition.) Los Angeles, CA: Western Psychological Services.

Franko, D. L. (1998). Secondary prevention of eating disorders in college women at risk. Eating Disorders: The Journal of Treatment and Prevention, 6, 29-40.

Franko, D., Weine-Orosan, P. (1998). The prevention of eating disorders: Empirical, methodological, and conceptual considerations. Clinical Psychology: Science and Practice, 5(4), 459-477.

Garner, D. (1991). The Eating Disorder Inventory-2. Odessa, FL: Psychological Assessment Resources, Inc.

Killen, J., Barr-Taylor, C., Hammer, L., Litt, I., Wilson, D., Rich, T., Hayward, C., Simmonds, B., Kraemer, H., & Varady, A. (1993). An attempt to modify unhealthful eating attitudes and weight regulation practices of young adolescent girls. International Journal of Eating Disorders, 13, 369-384.

Kilpatrick, M., Ohannessian, C, & Bartholomew, J. (1999). Adolescent weight management and perceptions: An analysis of the National Longitudinal Study of Adolescent Health. Journal of School Health, 69(4), 148-152.

Koenig, L. J., & Wasserman, E. L. (1995). Body image and dieting failure in college men and women: examining links between depression and eating. Sex Roles, 32, 222-249.

Lester, R., & Petrie, T. A. (1998). Physical, psychological, and societal correlates of bulimic symptomatology among African American college women. Journal of Counseling Psychology, 45, 315-331.

Levine, M. P., Smolak, L., & Schermer, F. (1996). Media analysis and resistance by elementary school children in the primary prevention of eating problems. Eating Disorders: The Journal of Treatment and Prevention, 4, 310-322.

Mann, T., Nolen-Hoeksema, S., Huang, K., Burgard, D., Wright, A., & Hanson, K. (1997). Are two interventions worse than none? Joint primary and secondary prevention of eating disorders in college females. Health Psychology, 16, 215-225.

Molloy, B., & Herzberger, S. (1998). Body image and self-esteem: A comparison fo African-American and Caucasian women. Sex Roles, 38, 631-635.

Moreno, A., & Thelen, M. (1993). A preliminary prevention program for eating disorders in a junior high school population. Journal of Youth and Adolescence, 22, 109-124.

Nebel, M. (1995). Prevention of disordered eating among college women: A clinical intervention. Dissertation Abstracts International, 56, 2878B.

Pesa, J. (1999) Psychosocial factors associated with dieting behaviors among female adolescents. Journal of School Health, 69(5), 196-201.

Phelps, L., Dempsey, M., Sapia, J., & Nelson, L. (1999). The efficacy of an eating disorder school-based prevention program: Building physical self-esteem and personal competence. In N. Piran, M. Levine, & C. Steiner-Adair, (Eds.), Preventing Eating Disorders: A Handbook of Interventions and Special Challenges. Philadelphia, P.A .: Brunner/Mazel.

Phelps, L., Johnston, L. S., & Augustyniak, K. (1999). Prevention of eating disorders: Identification of predictor variables. Eating Disorders: The Journal of Treatment and Prevention, 7, 99-108.

Rodin, J., Silberstein, L., & Striegel-Moore, R. H. (1985). Women and weight: A normative discontent. In T. B. Sonderegger (Ed.), Psychology and gender: Nebraska symposium on motivation, (pp.267-307). Lincoln: University of Nebraska Press.

Schulken, E., Pinciaro, P., Sawyer, R., Jensen, J., & Hoban, M. (1997). Sorority women's body size perceptions and their weight-related attitudes and behaviors. Journal of American College Health, 46, 69-75.

Schwitzer, A., Bergholz, K., Dore, T, & Salimi, L. (1998). Eating disorders among college women: Prevention, education, and treatment responses. Journal of American College Health, 46, 199-207.

Sigall, B. A. (1999). The Panhellenic task force on eating disorders: A program of primary and secondary prevention for sororities. In N. Piran, M. Levine, & C. Steiner-Adair (Eds.), Preventing Eating Disorders: A Handbook of Interventions and Special Challenges. Philadelphia, P.A .: Brunner/Mazel.

Stice, E., Schupak-Neuberg, E., Shaw, H. E., & Stein, R. I. (1994). Relation of media exposure to eating disorder symptomatology: An examination of mediating mechanisms. Journal of Abnormal Psychology, 103, 836-840.

Stevens, C., & Tiggemann, M. (1998). Women's body figure preferences across the lifespan. Journal of Genetic Psychology, 159, 94-103.

Striegel-Moore, R., & Steiner-Adair, C. (1998). Primary prevention of eating disorders: Further considerations from a feminist perspective. In W. Wandereycken & G. Norrdenbos (Eds.) Studies in Eating Disorders: An International Series. New York, N.Y. New York University Press.

Strong, K., & Huon, G. (1998). An evaluation of a structural model for studies of the initiation of dieting among adolescent girls. Journal of Psychosomatic Research, 44, 315-326.

Tiggemann, M., & Pickering, A. (1996). Role of television in adolescent women's body dissatisfaction and drive for thinness. International Journal of Eating Disorders, 20, 199-203.

Winzelberg, A. J. (1999). Evaluation of a computer- mediated eating disorder prevention program. Dissertation Abstracts International, 59(10-B), 5590.

Table 1

Univariate Analysis of Variance for Variables at Post-test

Variable	Control (N=35)	Experimental (N=45)	MS	F(1, 78)	p	Effect Size
BD	M 105.31	M 102.49	157.16	.586	.446	-.17
	SD 18.83	SD 14.21				
DT	M 107.94	M 101.64	781.00	7.65	.007	-.62
	SD 10.03	SD 10.17				
Social	M 84.49	M 91.62	1002.68	8.44	.005	.65
	SD 11.02	SD 10.80				
Physical	M 91.57	M 100.31	1503.77	10.74	.002	.74
	SD 13.42	SD 10.44				
Personal	M 80.17	M 88.76	1450.72	14.35	.000	.85
	SD 9.72	SD 10.31				
Methods	M 3.57	M 1.76	64.92	14.68	.000	-.86
	SD 2.42	SD 1.82				

Note. BD= body dissatisfaction, DT= drive for thinness, Social= social self-concept, Physical= physical self-concept, Personal= personal self-concept, Methods= methods of weight regulation.